ABSTRACT OF THE DISCLOSURE

An avalanche photodiode includes at least one crystal layer having a larger band-gap than that of an absorption layer formed by a composition or material different from that of the absorption layer formed on a junction interface between a compound semiconductor absorbing an optical signal and an Si multiplication layer, and the crystal layer may be intentionally doped with n or p type impurities to cancel electrical influences of the impurities containing oxides present on the junction interface of compound semiconductor and surface of Si.